ABSTRACT OF THE DISCLOSURE

A system and method for high voltage testing of twisted insulated conductors includes a high voltage power supply to be disposed within a rotating mechanism of a twinner. An electrode is coupled to the power supply and is to be disposed adjacent to a take-up reel within the rotating mechanism of the twinner. The electrode is for generating sparks between the electrode and the twisted insulated conductors when a fault in the insulation of the twisted conductors, when being wound on the take-up reel, passes by the electrode. A transmitter is to be disposed within the rotating mechanism for transmitting a signal carrying information representative of fault detection characteristics of the twisted insulated conductors. The information is derived from the sparks generated between the electrode and the twisted insulated conductors. A receiver is to be disposed outside of the rotating mechanism for receiving the signal from the transmitter.